

Colloidal Synthesis of MoS₂ Quantum Dots: Size-dependent Tunable Photoluminescence and Bioimaging

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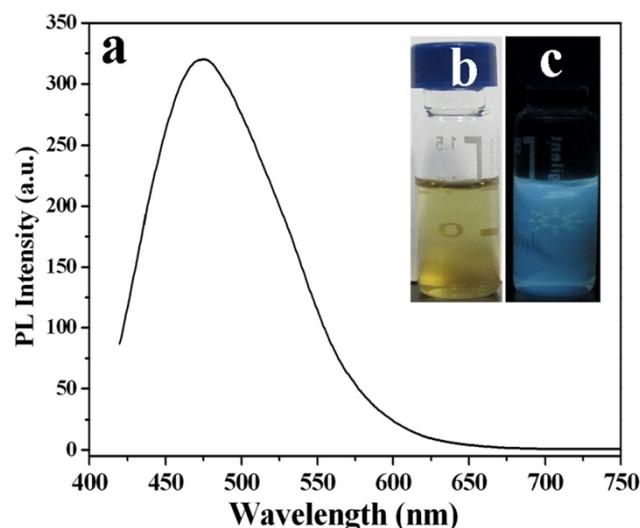


Fig. S1 a, The PL spectrum of WS₂ QDs in chloroform solution. The inset images show the photographs of WS₂ QDs: b, in room light and c, under a UV light source emitting 365 nm light.

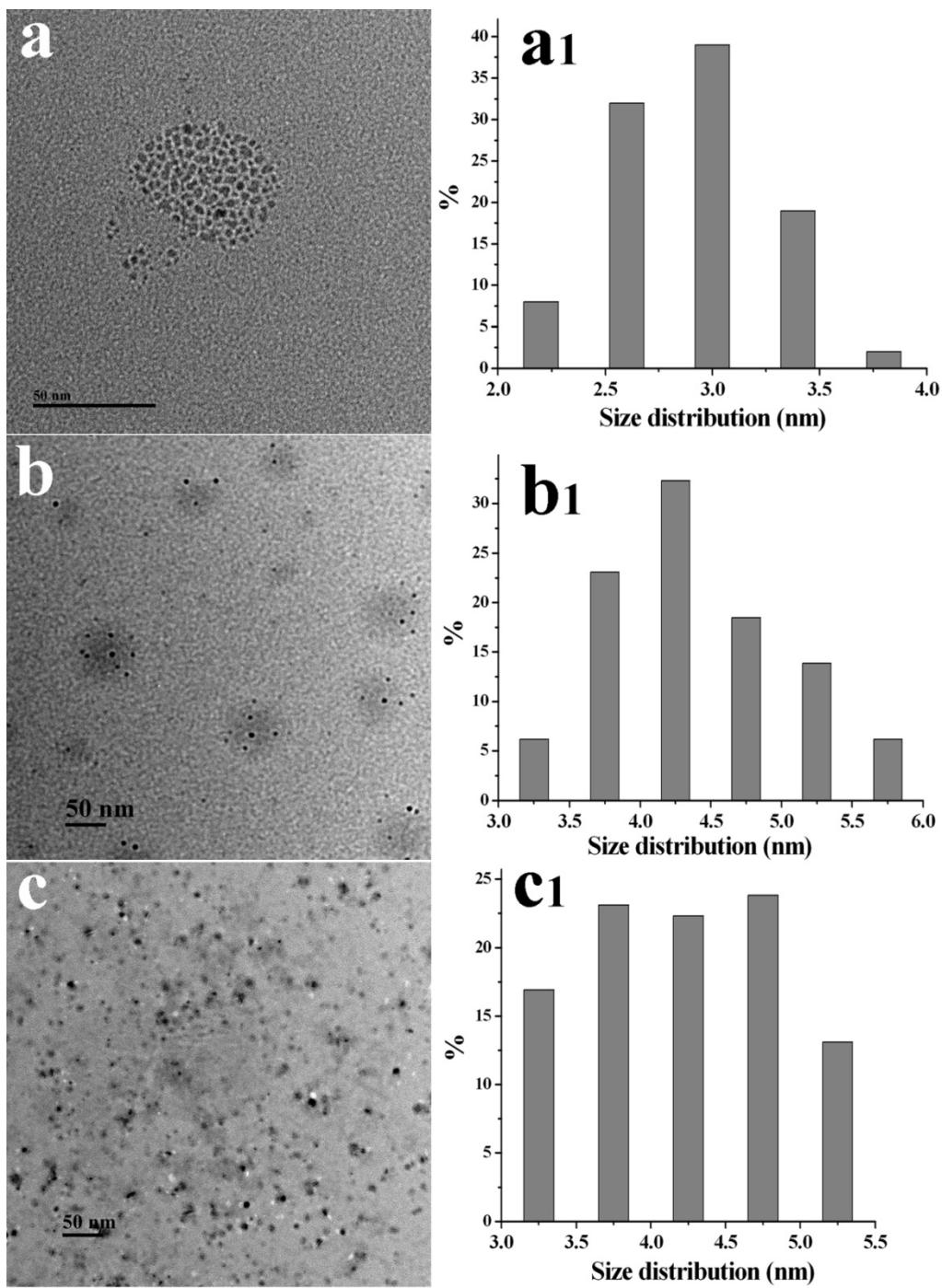


Fig. S2 The TEM images and size distributions of fluorescent MoS₂ QDs prepared under different amount of OLA: a, 0.25 ml (a1, 3.0 nm); b, 0.5 ml (b1, 4.0 nm); c, 1.0 ml (c1, 4.5 nm).

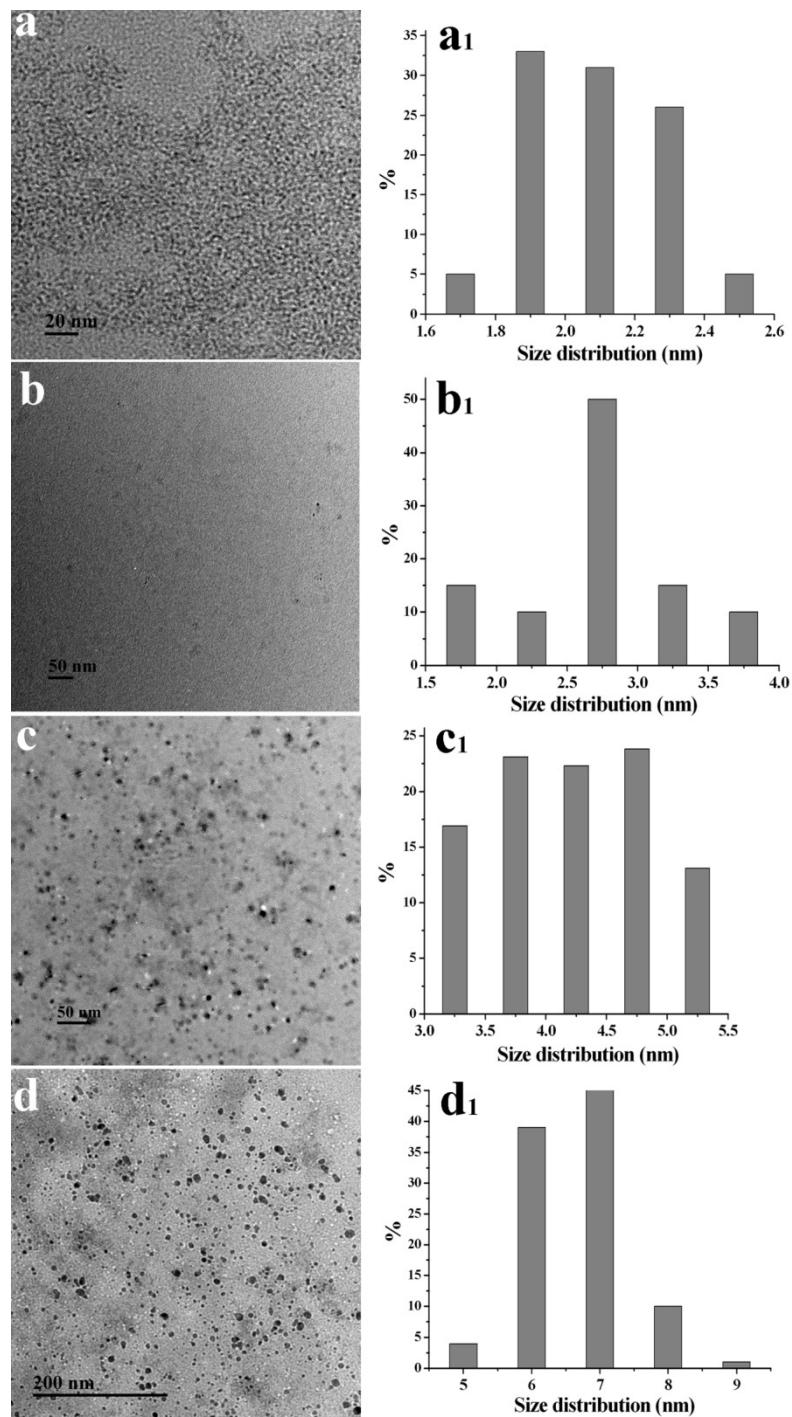


Fig. S3 The TEM images and size distributions of fluorescent MoS₂ QDs prepared under different reaction time: a, 0.5 h (a₁, 2.0 nm); b, 1.5 h (b₁, 2.7 nm); c, 3 h (c₁, 4.5 nm); d, 8 h (d₁, 7.0 nm).

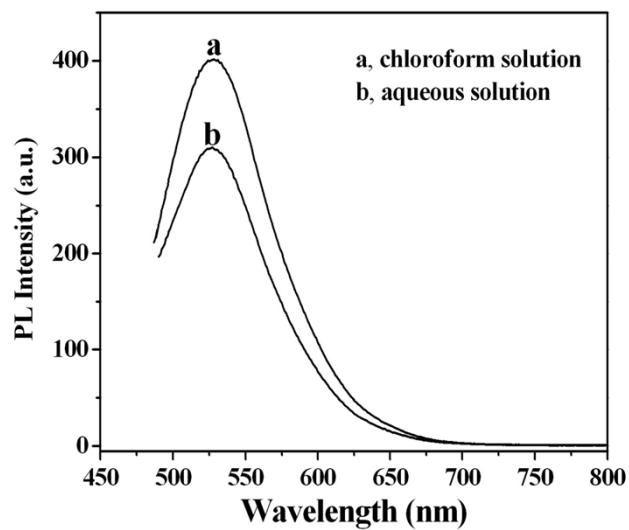


Fig. S4 The PL spectra of MoS₂ QDs: a, in chloroform solution and b, in aqueous solution.

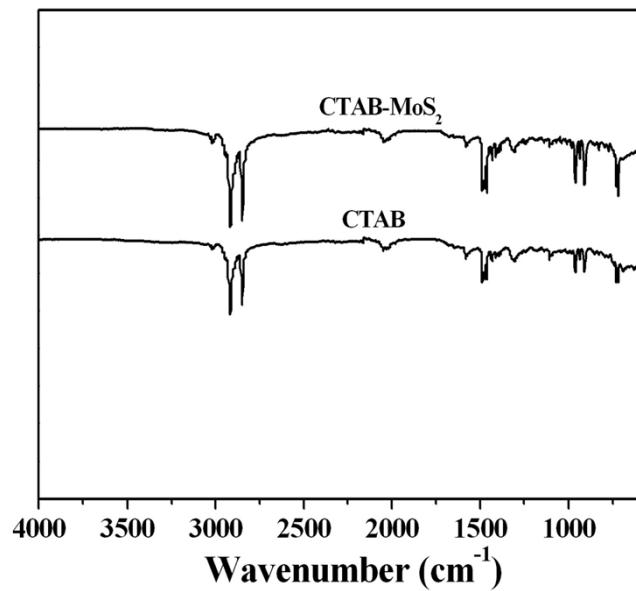


Fig. S5 FT-IR spectra of resultant CTAB–MoS₂ QDs and CTAB.